

REMARKS/ARGUMENTS

Claims 26-53, 56-61 and 64-68 are pending. New Claim 68 finds support in the specification on page 11, line 24-page 13, line 25. Accordingly, the Applicants do not believe that any new matter has been added. Favorable consideration is now respectfully requested.

The Applicants thank Examiner Katcheves for the courteous and helpful discussion of August 27, 2004. The Examiner requested that the Applicants point out descriptive support for Claim 46, directed to a particular vector. The vector of Claim 46 finds support in the specification at page 19, lines 9-10. This vector is contained in *E. coli* strain TOP10F/pCR2.11ysR2int as DSM 13617, which has been deposited under the conditions of the Budapest Treaty. As required by 37 C.F.R. 1.808, subject to the one exception permitted by 37 C.F.R. 1.808(b), all restrictions imposed by the depositor on the availability to the public of the deposited material will be irrevocably removed upon granting of the patent. See MPEP 2410.01. The claims have been revised without prejudice as suggested for facilitating the identification of allowable subject matter.

The Applicants also thank Examiner Katcheves for her prior indication that Claims 52, 53, 55-61 and 63-65 are otherwise in condition for allowance and her remarks in the Advisory Action indicating that the above amendments to Claims 26, 27, 31, 32, 39, 41-48 and 51 would obviate the prior description rejection. On the other hand the Advisory Action indicated that the description rejection would be maintained for proposed Claims 36, 37, 40 and 49 on the grounds that Applicants fail to establish possession of fragments consisting of at least 15 consecutive nucleotides of SEQ ID NO: 1 or residues 232-1161 of SEQ ID NO: 1. These concerns are addressed below.

Election/Restriction

The Applicants note that the Restriction Requirement has been made FINAL. The Applicants respectfully request that examination be extended beyond the elected species *dapA*, upon an indication of allowability for the generic claims.

Rejection—35 U.S.C. 112, first paragraph

Claims 25-51 were rejected under 35 U.S.C. 112, first paragraph, as lacking adequate description. The rejection of Claims 26, 27, 31, 32, 39, 41-48 and 51 is moot in view of the amendments above and in view of the remarks in the Advisory Action.

Claims 36, 37, and 40 have been revised to more clearly indicating that the claimed polynucleotides are fragments of SEQ ID NO: 1 or its full complement. With respect to the description rejection of Claims 36, 37, 40 and 49, the Applicants submit that the disclosure as filed clearly describes the polynucleotide sequence of SEQ ID NO: 1 as well as the coding sequence (CDS), see the original Sequence Listing and the specification, page 3, lines 11-20. Page 3 also describes “polynucleotides comprising at least 15 successive nucleotides chosen from the nucleotide sequence of SEQ ID NO: 1 between positions 232 and 1161”. Accordingly, there is explicit descriptive support for these claims.

Moreover, the specification, page 4, last four lines, describes the use of such oligonucleotides as probes or primers. The Applicants respectfully submit one with ordinary skill in the molecular biological arts would understand that oligonucleotides consisting of at least 15 consecutive nucleotides of SEQ ID NO: 1 or its full complement would be useful probes or primers for identifying or amplifying SEQ ID NO: 1 or its homologs. While these fragments may not necessarily encode polypeptides having LysR2 activity, clearly they could be used probes and primers and thus meet the enablement requirements of 35 U.S.C. 112, first paragraph. Moreover, such fragments could be made without undue experimentation

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since the polynucleotide sequence of SEQ ID NO: 1 is fully described. Accordingly, the Applicants respectfully submit that these claims now meet both the description and enablement requirements and this rejection may be withdrawn.

Rejection—35 U.S.C. 112, second paragraph

Claims 54, 62, 66 and 67 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. This rejection is moot in view of the amendment above.

Allowable Subject Matter

The Applicants thank Examiner Katcheves for indicating that the subject matter of Claims 52, 53, 55-61 and 63-65 is otherwise in condition for allowance.

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

Respectfully submitted,

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